

Birds of Goa¹

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Very little published information is available on the bird life of Goa during its occupancy by the Portuguese. Even after independence no work appears to have been done. Therefore Shri S. S. Bhattee (Conservator of Forests, Goa, Daman & Diu) invited the Bombay Natural History Society to conduct an ornithological survey. Accordingly a team of five consisting of Shri J. D. Panday, R. J. Pimento, M. U. Mahadik and ourselves made a brief field survey for 16 days, from 27th November to 12th December 1972.

Since the survey was so brief, only a rather superficial sampling of the total area could be done. Field work was confined mainly to 3 of the more forested localities, namely Molem, Canacona and Valpoi. It consisted of recording of species by observation and collecting specimens when necessary. 150 specimens of 100 species were collected and an additional 54 species sight recorded.

The following list is obviously incomplete. It does not include many other species which must certainly occur in Goa either as residents or as migrants, and it is hoped that a further more extensive survey will be possible for the record to be completed. For lists of birds that have been recorded in the adjoining areas see, for North Kanara, Davidson, J. (1898): *JBNHS* 2 parts, Vols. 11 and 12; for Karnataka, Sálim Ali (1942-43): *ibid.* 5 parts. Vols. 43 and 44.

PHYSIOGRAPHY

Goa is a tract of undulating country on the western seaboard of India, wedged between the Arabian Sea on the west and the Sahyadri range (Western Ghats) on the east. It lies between latitudes 14°53' and 15°48' N., and longitudes 73°45' and 74°24' E., and covers an area of 3370 square kilometres (IMPERIAL GAZETTEER OF INDIA Vol. 12, p. 249). The State abuts on the Savantvadi taluka of Ratnagiri district (Maharashtra) in the north, and on the Dharwar district of Karnataka on the east and south. The crest of the Sahyadri range running N-S virtually forms the entire eastern boundary. Luxuriant evergreen and semi-evergreen forests occur in deep gorges and ravines in the northeastern and southeastern portions adjoining Karnataka. Tree growth is mostly stunted on the precipitous hillsides. The rainfall in this forest zone varies between 5100 and 7600 mm per annum, all during the SW monsoon. Under the erstwhile Portuguese regime the zone of evergreens was classified as "A" class forest and far sightedly preserved "for regulation of the climate and water flow, and conservation of soil in the hill tracts." Moist-deciduous forests, mostly secondary and degraded, occur along the foothills of the Sahyadris. They were classified as the "B" type, and being more accessible were exploited, often wastefully, for commercial timber and fuel. Class "C" forests—also Moist-deciduous, but occurring around villages and habitations—were earmarked for the domestic requirements of the local popu-

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lation: for agricultural purposes, firewood, leaf fodder for cattle, and for *cumeri* or shifting cultivation. Vast areas of excellent forest everywhere in Goa, especially on the higher hill slopes, have been ruined and rendered unproductive by this pernicious practice.

WILDLIFE

As a result of official encouragement, and even incentives, given to hunters during the Portuguese colonial administration the forests have been effectively denuded of all wildlife, especially mammals, Birds of Prey and other large birds. During a week's survey of the forested area at Molem—now hopefully established as a wildlife sanctuary—not a single large mammal was heard or seen—not even any spoor—except one Giant Squirrel (*Ratufa*). The entire Molem, Carranzol and Neterlim valleys adjoining Karnataka were completely dead though densely covered with magnificent semi-evergreen and moist-deciduous forest. Wild animals such as gaur, sambar and pig are said occasionally to stray in from across the border, from Dandeli Wildlife Sanctuary of Karnataka, and with adequate protection the Forest Department hopes to rehabilitate these and other species here. The only other wild mammal seen during the Survey was a leopard cat (*Felis bengalensis*) that had been shot anonymously and propped up in the middle of a forest road in the Canacona area!

Large areas of degraded forest at Valpoi and elsewhere have been clear felled by the Forest Department and planted with teak, rubber, eucalyptus, cocoa and cashew, and the impact of this intrusion, mostly exotics, on indigenous bird life will repay careful monitoring.

An excursion was made to the top of Vagheri in Valpoi taluka, just under 1000 m and said to be the highest hill in Goa. This was specially

in order to establish whether or not the plant genus *Rubus* (brambles) and its symbiotic bird genus *Garrulax* (laughing thrushes) also occur in Goa as both do in the Kerala ranges a couple of hundred metres above this elevation. While bracken (*Pteridium* sp.) another regular member of this plant-bird association, was plentiful near the top, there was no sign of *Rubus* or *Garrulax* although otherwise the biotope seemed eminently appropriate.

SYSTEMATIC LIST

The measurements of the specimens collected, are given in the following order: Body weight (in grams), wing length, bill, tarsus, and tail (in mm). Bill has been measured from skull. Unless otherwise stated, all the species recorded are within their known geographical range of distribution. Subspecies are given only for the birds actually collected and examined, although it is unlikely that the identity of the others would be different from those of better worked adjoining areas.

1. *Ardeola grayii* (Sykes) Pond Heron
Noted: Molem, Canacona
2. *Bubulcus ibis* (Linnaeus) Cattle Egret
Noted: Valpoi
3. *Elanus caeruleus* (Desfontaines) Black-winged Kite
Noted: Maem, Molem
4. *Pernis ptilorhynchus ruficollis* Lesson
Crested Honey Buzzard
Collected: Canacona ♂ 1050 g. c. 440,
42 52 263.
Dark and pale tail bands of equal breadth,
and the wing-tail index less than 65 (i.e. 60).
5. *Milvus migrans* (Boddaert) Pariah Kite
Noted in urban areas.
6. *Haliastur indus* (Boddaert) Brahminy Kite
Noted: Maem Lake environs
7. *Accipiter badius dussumieri* (Temminck)

- Shikra
Collected: Molem, Valpoi
♂ — 183 — — 138
♀ 233 g 195 21 54 154
Elsewhere noted: Canacona
8. *Accipiter trivirgatus* (Temminck) Crested Goshawk
Noted: Molem
9. *Butastur teesa* (Franklin) White-eyed Buzzard-Eagle
Collected: Molem
♀ 450 g 305 30 67 164
Elsewhere noted: Maem Lake environs, Canacona
10. *Ictinaetus malayensis* (Temminck) Black Eagle
Noted: Canacona
11. *Gyps bengalensis* (Gmelin) Whitebacked Vulture
Noted: Canacona
12. *Spilornis cheela melanotis* (Jerdon) Peninsular Serpent Eagle
Collected: Molem
♂ 1200 g 416 42 101 258
13. *Pandion haliaetus* (Linnaeus) Osprey
Noted: Canacona
14. *Falco peregrinus peregrinator* Sundevall
Shahin Falcon
Noted: Molem
15. *Falco tinnunculus interstinctus* McClelland
Kestrel
Collected: Molem
♂ 150 g 259 21 42 171
Elsewhere noted: Canacona
Although the specimen is in subadult plumage it is paler than other subspecies in subadult plumage.
16. *Coturnix coturnix* (Linnaeus) Grey Quail
Noted: Valpoi
17. *Galloperdix spadicea* (Gmelin) Red Spur-fowl
Noted: Various localities
18. *Gallus sonneratii* Temminck
Grey Junglefowl
Noted: Molem, Canacona
19. *Turnix suscitator* (Gmelin) Common Bustard-Quail
Noted: Various localities
20. *Amaurornis phoenicurus* (Pennant)
Whitebreasted Waterhen
Noted: Canacona
21. *Fulica atra* Linnaeus Coot
Noted: North Goa
22. *Vanellus indicus* (Boddaert) Redwattled Lapwing
Noted: Molem, Canacona
23. *Tringa ochropus* Linnaeus
Green Sandpiper
Noted: Maem Lake
24. *Gelochelidon nilotica* (Gmelin) Gullbilled Tern
Noted: North Goa
25. *Treron pompadora affinis* (Jerdon) Grey-fronted Green Pigeon
Collected: Valpoi
♂ 146 g 142 20 23 moult
♀ 153 g 144 20 22 82
Elsewhere noted: Molem, Canacona
26. *Ducula badia* (Raffles) Imperial Pigeon
Noted: Canacona
27. *Columba livia* Gmelin Blue Rock Pigeon
Noted: Canacona
28. *Columba elphinstonii* (Sykes) Nilgiri Wood Pigeon
Collected: Molem
o? 340 g 203 28 26 157
Elsewhere noted: Canacona
29. *Streptopelia orientalis erythrocephala*
Bonaparte Rufous Turtle Dove
Noted: Maem Lake environs, Molem
30. *Streptopelia chinensis* (Scopoli) Rufous Turtle Dove
Noted: Maem Lake environs, Molem
31. *Streptopelia senegalensis* (Linnaeus)

- Little Brown Dove
Noted: Canacona
32. *Chalcophaps indica* (Linnaeus) Emerald Dove
Noted: Molem
33. *Psittacula cyanocephala cyanocephala* (Linnaeus) Blossomheaded Parakeet
Collected: Molem
♂ 69 g 140 18 (from cere) c. 11 219
♀ 63 g 130 17 (from cere) c. 11 150
Elsewhere noted: Canacona
34. *Psittacula columboides* (Vigors) Blue-winged Parakeet
Noted: Canacona, Molem. Generally common.
35. *Loriculus vernalis* (Sparrman) Lorikeet
Noted: Valpoi
36. *Cuculus micropterus* Gould Indian Cuckoo
Noted: Canacona
37. *Eudynamys scolopacea scolopacea* (Linnaeus) Koel
Collected: Canacona
♂ 162 g 193 31 34 198
Elsewhere noted: Molem
38. *Centropus sinensis parroti* Stresemann Crow-pheasant
Collected: Molem
♀ 312 g 195 43 57 255
Elsewhere noted: Canacona
39. *Glaucidium radiatum* (Tickell) Barred Owlet
Noted: Maem Lake environs, Molem, Canacona, Valpoi
40. *Eurostopodus macrotis* (Vigors) Great Eared Nightjar
Noted: Valpoi. The characteristic whistling *whi-wheew* calls were regularly heard in the evening at dusk.
41. *Caprimulgus indicus indicus* Latham Jungle Nightjar
Collected: Valpoi
- ♂ 60 g 189 24 14 125
By plumage and measurements it is difficult to differentiate *indicus* from the closely resembling neighbouring race *hazarae* without a series.
42. *Caprimulgus macrurus atripennis* Jerdon Longtailed Nightjar
Collected: Canacona
♂ 74 g 186 24 19 131
43. *Chaetura sylvatica* (Tickell) Whiterumped Spinetail Swift
Collected: Molem
o ? 13 g 113 9 10 35
44. *Cypsiurus parvus* (Lichtenstein) Palm Swift
Noted: Molem
45. *Hemiprocne longipennis* (Rafinesque) Crested Tree Swift
Noted: Molem, Canacona, feeding parties over forest with characteristic *whit-tuck* calls.
46. *Harpactes fasciatus malabaricus* (Gould) Malabar Trogon
Collected: Molem, Canacona
♂ 64 g 125 20 15 158
2 ♀ ♀ 60 g, 64 g, 123, 125 20, 21 16, 16 158, 166
Call, a deliberate unhurried *cue-cue-cue*, three or four times repeated.
47. *Alcedo atthis taprobana* Kleinschmidt Small Blue Kingfisher
Collected: Molem
♀ 23 g 69 42 10 30
48. *Alcedo meninting* ssp? Blue-eared Kingfisher
Collected: Canacona, Molem
♂ 25 g 71 44 11 31
♀ 28 g 71 43 9 31
By distribution and characters this specimen falls in ssp. *coltarti* Baker, but there is no way of distinguishing it from *rufigaster*. Humayun Abdulali (JBNHS 64:174) has already

indicated that it is difficult to separate *rufigaster* from *coltarti*.

49. *Halcyon smyrnensis* (Linnaeus) White-breasted Kingfisher

Noted: Maem Lake, Molem, Canacona

50. *Merops leschenaulti leschenaulti* Vieillot Chestnutheaded Bee-eater

Collected: Molem

♀ 24 g 108 39 12 81

Elsewhere noted: Maem environs

51. *Merops philippinus* Linnaeus Bluetailed Bee-eater

Noted: Maem Lake, near Bicholim, small numbers.

52. *Merops orientalis* Latham Little Green Bee-eater

Noted: Molem, Canacona

53. *Nyctyornis athertoni* (Jardine & Selby) Bluebearded Bee-eater

Noted: Molem (JDP)

54. *Coracias garrulus semenowi* Loudon & Tschudi Kashmir Roller

Collected: Canacona 7 Dec. 1972

♀ (imm) 120 g 190 40 24 124

An immature solo, apparently a straggler.

Remiges and primary coverts freshly moulted. Rectrices and body plumage very worn. One of the two southernmost records from peninsular India, the earlier being from Karwar immediately south of Goa.

55. *Coracias benghalensis* ssp? Roller or Blue Jay

Collected: Molem

♀ 115 g 175 38 26 122

Elsewhere noted: Canacona

Nuchal collar is entirely absent, and it is lighter green on the upperparts than the subspecies *indica*. This specimen is not distinguishable from the northern race *bengalensis*. However, according to the range arbitrarily fixed, the specimen should be considered as *indica*. Commonly seen singly on telegraph wires.

56. *Upupa epops* ssp? Hoopoe

Collected: Molem

o? 59 g Wing — Bill 56 Ts 25 Tl—

In plumage and measurements the specimen agrees with the subspecies *epops* Linnaeus as well as with *saturata* Lönnerberg. There is no character distinct enough to separate *epops* from *saturata*. Ali & Ripley (HANDBOOK 4: 127) consider *saturata* as of questionable validity.

Elsewhere noted: Canacona

57. *Tockus griseus griseus* (Latham) Malabar Grey Hornbill

Collected: Molem

♂ 336 g 210 102 42 229

Elsewhere noted: Canacona

Dipping flight in silhouette very like *Nyctyornis* or *Megalaima virens*.

58. *Anthracosceros coronatus coronatus* (Boddaert) Malabar Pied Hornbill

Collected: Molem

♀ 1000 g 310 204 (from forehead) 160 (from gape) 51 310

Elsewhere noted: Canacona.

Orbital skin, cheek pads and gular skin pinkish creamy white. Bill creamy white. 2/3 of casque (terminal) and patch at base of lower mandible black.

59. *Buceros bicornis* Linnaeus Great Pied Hornbill

Noted: Molem

Party of 3 (RJP) Canacona

60. *Megalaima zeylanica inornata* Walden Large Green Barbet

Collected: Molem

♂ 123 g 123 36 30 71

61. *Megalaima viridis* (Boddaert) Small Green Barbet

Collected: Molem

♀ 84 g 100 26 27 59

62. *Megalaima rubricapilla malabarica* (Blyth) Crimsonthroated Barbet

- Collected: Molem
 ♀ 38 g 82 18 21 38
 In evergreen forest. Call like *haemaphysalis*, but faster in tempo.
63. *Micropternus brachyurus jerdonii* (Malherbe) Rufous Woodpecker
 Collected: Molem
 ♂ 108 g 130 30 23 69
 Elsewhere noted: Canacona
64. *Dinopium benghalense puncticolle* (Malherbe) Goldenbacked Woodpecker
 Collected: Canacona
 ♂ 132 g 149 44 26 tail moult
 The southern birds have been separated into two races; *puncticolle* having orange-yellow back and *tehminae* having golden olive-yellow back. However, it is hard to place this specimen or many others in the BNHS collection, obtained from various regions, under either of the races with certainty as the extent of gold and orange on the back is highly variable and not restricted to birds from any one area.
65. *Dryocopus javensis* (Horsfield) Great Black Woodpecker
 Noted: Molem (JDP), Canacona
66. *Picoides nanus hardwickii* (Jerdon) Brown-crowned Pigmy Woodpecker
 Collected: Molem
 ♀ 15 g 75 16 15 35
 Elsewhere noted: Valpoi
67. *Hemicircus canente* (Lesson) Heart-spotted Woodpecker
 Collected: Molem and Canacona
 2 ♂ ♂ 35, 38 g 93, 96 23, 24 19, 19 33, 34
 ♀ 30 g 92 19 17 34
 Elsewhere noted: Molem: Pairs, Canacona: Common
68. *Chrysocolaptes lucidus chersonesus* Kloss Larger Goldenbacked Woodpecker
 Collected: Valpoi
- 2 ♀ ♀ 163, 164 g 152, 157 46, 49 31, 32 80, 82
 This race has been separated from *sultaneus* and *guttacristatus* by the intensity of yellow and olive on the back. However, these specimens and others in the BNHS collection vary considerably in the extent of coloration inconsistent with the locality.
69. *Calandrella cinerea* (Gmelin) Short-toed Lark
 Noted: Canacona, in flocks
70. *Galerida malabarica* (Scopoli) Malabar Crested Lark
 Collected: Canacona
 ♂ 31 g 98 16 23 54
71. *Hirundo rupestris* Scopoli Crag Martin
 Noted: Valpoi
 Distinguished from Dusky Crag Martin in overhead flight by pale underparts contrasting with blackish under tail-coverts.
72. *Hirundo rustica* Linnaeus Swallow
 Noted: Panaji
73. *Hirundo daurica* Linnaeus Striated Swallow
 Noted: Molem. Abundant on telegraph wires. Rump whitish. Subspecies *rufula* or *nipalensis*
74. *Lanius schach caniceps* Blyth Rufous-backed Shrike
 Collected: Molem
 ♂ 28 g 89 21 28 —
 Elsewhere noted: Maem environs, Canacona.
75. *Lanius cristatus cristatus* Linnaeus Brown Shrike
 Collected: Molem
 ♂ 32 g 89 19 26 85
76. *Oriolus oriolus kundoo* Sykes Golden Oriole
 Collected: Molem
 ♂ 60 g 142 31 24 —

- Elsewhere noted: Canacona
77. *Oriolus xanthornus* (Linnaeus)
Blackheaded Oriole
Noted: Molem, Canacona
78. *Dicrurus adsimilis* (Bechstein)
Black Drongo
Collected: Molem
♂ 49 g 151 23 22
Tail central 153 outer 103
Two subspecies are recognized from India: *Dicrurus adsimilis albirictus* and *Dicrurus adsimilis macrocercus*, separated only on size. The former (northern) has wing 145-165 and the latter (peninsular) 130-145. Perhaps if more specimens with such long wings can be obtained from the south we might be able to group all the Indian populations in a single cline. Alternatively there may be a certain amount of migration from the north into peninsular India in winter, and the above specimens may be one of such migrants.
79. *Dicrurus leucophaeus longicaudatus* Hay
Grey Drongo
Collected: Molem
♀ 37 g 128 27 19 88/143
Elsewhere noted: Canacona, in a mixed foraging party in forest.
Measurements of the races overlap and hence in the absence of a series only the area of collection, which is within the known wintering range, has been taken as the criterion for identification.
80. *Dicrurus caerulescens caerulescens* (Linnaeus) Whitebellied Drongo
Collected: Molem
3♂♂ 36-40 g 123-131 25-26 19-21 110-122
Elsewhere noted: Canacona
81. *Dicrurus aeneus aeneus* Vieillot
Bronzed Drongo
Collected: Canacona
o? 23 g 113 23 17 90/105
- Elsewhere noted: Molem
82. *Dicrurus hottentottus hottentottus* (Linnaeus) Haircrested Drongo
Collected: Canacona, Valpoi
2♂♂ 81,82 g 165(2) 39,41 26,27 119,124 134,138
The bill measurements quoted from Vaurie in INDIAN HANDBOOK (5:133) as 26-30 mm for males are wrongly stated to be 'from skull'; actually they are 'from feathers'. SA. measures bill 'from skull' of his own specimens as 6♂♂ 39-43, 8♀♀ 36-42
83. *Dicrurus paradiseus paradiseus* Linnaeus
Large Racket-tailed Drongo
Collected: Molem
♂ 80 g 154 32 28 racket feathers missing (moult?)
o? 84 g 163 36 28 420
Elsewhere noted: Canacona
84. *Sturnus malabaricus* (Gmelin)
Greyheaded Myna
Noted: Maem environs, flock c. 30. The flock contained some unmistakable examples of the white-headed form *blythii*. Panaji.
85. *Acridotheres tristis* (Linnaeus)
Indian Myna
Noted: Canacona and elsewhere—particularly around habitations.
86. *Acridotheres fuscus* (Wagler)
Jungle Myna
Noted: Canacona
87. *Dendrocitta vagabunda* (Latham)
Tree Pie
Noted: Maem Lake environs; Molem, Canacona.
88. *Corvus splendens* Vieillot House Crow
Noted: Molem, Canacona, Panaji. Abundant. Vast roosting congregations in trees around the Circuit House and in Panaji city, whitening the ground below.
89. *Corvus macrorhynchos* Wagler
Jungle Crow

- Noted: Molem, Canacona, Maem and Bicholim environs. Commoner than *splendens* around outlying hamlets.
90. *Hemipus picatus picatus* (Sykes)
Pied Flycatcher-Shrike
Collected: Canacona
♂ 9 g 60 15 12 56
91. *Tephrodornis gularis sylvicola* Jerdon
Large Wood Shrike
Collected: Canacona
♀ 41 g 114 28 20 83
♂ 41 g 114 28 20 80
92. *Tephrodornis pondicerianus* (Gmelin)
Common or Lesser Wood Shrike
Noted: Maem Lake environs. Molem, Canacona
93. *Coracina novaehollandiae* (Gmelin)
Large Cuckoo-Shrike
Noted: Canacona
94. *Coracina melanoptera sykesi* (Strickland)
Blackheaded Cuckoo-Shrike
Collected: Molem
♂ 30 g 108 20 — —
Elsewhere noted: Canacona
95. *Pericrocotus flammeus flammeus* (Forster) Orange Minivet
Collected: Molem
♂ 26 g 92 19 17 80
Elsewhere noted: Canacona, in mixed foraging parties in forest.
96. *Pericrocotus roseus roseus* (Vieillot)
Rosy Minivet
Collected: Canacona
♀ 18 g 81 17 15 82
No yellow except on the speculum, tail, and under wing-coverts. Probably an immature bird. There is no record from or around Goa. Recorded as occasional winter visitor in Maharashtra, Kerala and Madhya Pradesh.
97. *Pericrocotus cinnamomeus malabaricus* (Gmelin) Small Minivet
Collected: Valpoi
- ♂ 10 g 67 13 16 68
An immature bird whose racial status has been decided only by range.
Elsewhere noted: Molem, Canacona
98. *Aegithina tiphia deignani* Hall Iora
Collected: Canacona
♂ 15 g 65 19 19 47
Subspecific status decided by range. Plumage and measurements are not markedly different from other subcontinental races.
Elsewhere noted: Molem
99. *Chloropsis aurifrons frontalis* (Pelzeln)
Goldfronted Chloropsis
Collected: Molem
♀ 30 g 88 20 16 60
Elsewhere: Canacona. In mixed foraging parties in forest. Subspecies based on known and arbitrarily fixed range of distribution, though the specimen is somewhat smaller.
100. *Chloropsis cochinchinensis jerdoni* (Blyth) Jerdon's Chloropsis
Collected: Canacona
♂ 30 g 92 24 19 71
♀ 26 g 84 24 19 65
The male appears immature as the throat is only patchily black and without the yellowish penumbra.
101. *Irena puella puella* (Latham)
Fairy Bluebird
Collected: Molem
♂ 66 g 123 29 19 97
♀ 57 g 121 26 20 96
Elsewhere noted: Canacona, in mixed foraging parties in forest.
102. *Pycnonotus priocephalus* (Jerdon)
Greyheaded Bulbul
Collected: Molem, Canacona
4 ♂ 21-28 76-77 15-17 16(4) 72-80
The chin colour (black) is restricted in all the four specimens and does not extend to the throat as in some examples in the BNHS collection. But this character is not consistent,

and both types are found within more or less the same geographical range.

103. *Pycnonotus melanicterus gularis* (Gould)
Rubythroated Yellow Bulbul

Collected: Molem

2♂♂ 18,22 g 75,80 15(2) 15,17 70,76

2♀♀ 15,19 72,73 15(2) 16,17 69(1)

Elsewhere noted: Canacona

The occurrence of this bulbul in Goa, questioned in the INDIAN HANDBOOK (6:73), is now confirmed.

104. *Pycnonotus jocosus fuscicaudatus*
(Gould) Redwhiskered Bulbul

Collected: Molem

♂ 28 g 85 20 22 80

Elsewhere noted: Canacona, Maem

105. *Pycnonotus cafer* (Linnaeus)

Redvented Bulbul

Noted: Molem, Canacona

106. *Pycnonotus luteolus luteolus* (Lesson)

Whitebrowed Bulbul

Collected: Canacona

♀ 31 g 87 20 22 81

Common in bush country.

107. *Hypsipetes indicus indicus* (Jerdon)

Yellowbrowed Bulbul

Collected: Valpoi

3♂♂ 31-35 g 89-95 20-22 18-20 80-81

2♀♀ 28,31 g 89,93 20,21 19,20 76,81

Elsewhere noted: Canacona. In mixed foraging parties in forest.

108. *Hypsipetes madagascariensis*

(P.L.S. Müller) Black Bulbul

Noted: Molem, Canacona

109. *Pellorneum ruficeps* Swainson

Spotted Babbler

Collected: Molem

♂ 31 g 77 20 28 72

2♀♀ 26,27 g 69(2) 20(1) 27(2) 60(1)

Elsewhere noted: Canacona

110. *Pomatorhinus schisticeps* Hodgson

Scimitar Babbler

Noted: Molem

111. *Rhopocichla atriceps atriceps* (Jerdon)

Blackheaded Babbler

Collected: Molem, Canacona

3♂♂ 15-16 g 56-60 14-16 22-24 49-50

112. *Turdoides subrufus subrufus* (Jerdon)

Rufous Babbler

Collected: Molem

♂ 57 g 92 23 35 114

♀ 58 g 90 22 35 107

113. *Turdoides striatus somervillei* (Sykes)

Jungle Babbler

Collected: Molem

2♂♂ 66,69 g 98,101 23(2) 36,37 94,100

Elsewhere noted: Canacona

114. *Alcippe poiocephala poiocephala*

(Jerdon) Quaker Babbler

Collected: Molem, Canacona, Valpoi

2♂♂ 17,20 g 72,73 16,17 22,23 64,66

2♀♀ 20,21 g 70,74 16,18 22(2) 65(2)

1♂ juv.

Foraging parties, often high up in trees.

115. *Muscicapa muttui muttui* (Layard)

Brownbreasted Flycatcher

Collected: Molem

♂ 12 g 70 16 15 52

2♀♀ 10,10 g 69,72 16,16 14,15 48,49

o? 10 g 71 17 15 51

Elsewhere noted: Canacona

116. *Muscicapa parva parva* Bechstein

Redbreasted Flycatcher

Collected: Molem

o? 8 g 66 11 14 46

Elsewhere noted: Canacona

117. *Muscicapa supercilialis supercilialis*

Jerdon Whitebrowed Blue Flycatcher

Collected: Molem

♂ 8 g 62 15 15 46

118. *Muscicapa pallipes* Jerdon

Whitebellied Blue Flycatcher

Collected: Molem

♂ 20 g 78 17 19 63

- 3 ♀ ♀ 18-20 g 70-73 17-18 19(3) 55-56
Elsewhere noted: Canacona
119. *Muscicapa rubeculoides rubeculoides* (Vigors) Bluethroated Flycatcher
Collected: Valpoi
♂ 13 g 74 14 18 53
o? 12 g 70 14 17 51
120. *Muscicapa tickelliae* (Blyth) Tickell's Redbreasted Blue Flycatcher
Collected: Molem, Valpoi
2♂♂ 14(2)g 72,73 15,17 18(2) 55(2)
2♀♀ 13,17 g 69,71 15,17 17,19 55(2)
Elsewhere noted: Canacona
121. *Muscicapa thalassina thalassina* Swainson Verditer Flycatcher
Collected: Molem, Valpoi
♂ 17 g 84 13 15 —
♀ 17 g 80 13 16 64
Elsewhere noted: Canacona
122. *Terpsiphone paradisi leucogaster* (Swainson) Paradise Flycatcher
Collected: Molem
♂ 17 g 92 24 17 242
Male in chestnut plumage with white underparts, presumably on migration.
Noted: Molem, Canacona; in mixed foraging parties in forest, possibly with other subspecies.
123. *Monarcha azurea styani* (Hartlaub) Blacknaped Monarch Flycatcher
Collected: Valpoi, Molem
♂ 9 g 69 — 17 69
2♀♀ 9,11 g 68,69 15(2) 16,17 65,67
Elsewhere noted: Maem environs, Canacona
In mixed foraging parties in forest.
124. *Orthotomus sutorius* (Pennant) Tailor Bird
Noted: Molem, Canacona and elsewhere
125. *Acrocephalus dumetorum* Blyth Blyth's Reed Warbler
Collected: Molem
- ♂ 10 g 62 18 23 50
♀ 11 g 62 18 23 53
Elsewhere noted: Canacona
126. *Phylloscopus tytleri* Brooks Tytler's Leaf Warbler
Collected: Canacona
♂ 7 g 58 13 18 42
Very little is known of its wintering habits. So far only three specimens have been recorded, south of its breeding area. The records are from Khandala, Londa and Nilgiris. This specimen from Goa is thus the fourth record from the western ghats and it may be assumed that *Phylloscopus tytleri* is a regular winter visitor to the western ghats. The specimen has worn wing and tail feathers.
127. *Phylloscopus griseolus* Blyth Olivaceous Leaf Warbler
Collected: Molem
♂ 8 g 64 14 18 48
This species is known to winter down to North Kanara.
128. *Phylloscopus occipitalis occipitalis* (Blyth) Large Crowned Leaf Warbler
Collected: Molem, Canacona
3♂♂ 8(3)g 65-67 13-15 18-19 49-51
o? 8 g 62 15 17 47
129. *Copsychus saularis* (Linnaeus) Magpie Robin
Noted: Bicholim; Canacona; Molem
130. *Copsychus malabaricus malabaricus* (Scopoli) Shama
Collected: Canacona; in mixed foraging parties in forest.
♀ 28 g 88 19 26 122
Placed in the nominate race by locality. This and the neighbouring race *indicus* are separated only by the length of the tail which averages shorter in the latter. The tail of this specimen is within the overlapping limits of both the races.
131. *Phoenicurus ochruros* (S. G. Gmelin)

- Redstart
Noted: Molem
132. *Saxicoloides fulicata* (Linnaeus)
Indian Robin
Noted: Canacona. Common generally.
133. *Monticola cinclorhynchus* (Vigors)
Blueheaded Rock Thrush
Collected: Molem, Canacona.
3♂♂ 32-33g 99-103 22-24 24-26 65-69
o? 31g 98 22 24 64
Elsewhere noted: Canacona. In mixed
foraging parties in forest.
143. *Monticola solitarius* (Linnaeus)
Blue Rock Thrush
Noted: Molem, Canacona.
135. *Myiophonus horsfieldii* (Vigors)
Malabar Whistling Thrush
Noted: Molem
136. *Zoothera citrina cyanotus* (Jardine & Selby)
Whitethroated Ground Thrush
Collected: Molem, Valpoi
2♂♂ 48,52g 105,109 23,24 30,32 70,72
Elsewhere noted: Canacona
137. *Turdus merula nigropileus* (Lafresnaye)
Blackcapped Blackbird
Collected: Molem, Valpoi
2♂♂ 69,73g 121,129 25,26 32(2) 91,93
One of the specimens (No. 50) comes
under *nigropileus* by plumage, measurements
and range of distribution.
- The other specimen (No. 135) differs
as follows: It does not have a distinct collar
behind nape. It is possibly not fully adult as
seen from pale brownish edges to the upper
wing-coverts. But as immature it should also
have streaks on the throat and other places
which are totally lacking in this specimen, and,
but for the upper wing-coverts it is adult plu-
mage. By plumage the bird belongs to the sub-
species *simillimus*. Measurements are within
the known limits. The only difference then
would be the bill which was dark with orange
gape which is known to be a colour variation
in *nigropileus* HANDBOOK 9:119 (1973). In
T. merula simillimus the bill colour is record-
ed as only orange yellow.
- The implication here is: 1. The specimen
is of the subspecies *T. merula simillimus* and
its bill colour, possibly an unrecorded varia-
tion.
- or 2. A hybrid between the subspecies
nigropileus and *simillimus*.
- The latter (2) is more acceptable as the
place of collection is the transitional area of
the two subspecies.
- Elsewhere noted: Canacona, in mixed
foraging party in forest.
138. *Sitta frontalis frontalis* Swainson
Velvetfronted Nuthatch
Collected: Molem
♂ 12g 72 14 18 38
139. *Anthus hodgsoni* ssp?
Tree Pipit
Collected: Molem
♂ 22g 85 14 21 60
- Two subspecies namely *hodgsoni* and
yunnanensis are known to winter in India. It
is difficult to place this single specimen under
either.
140. *Anthus trivialis* (Linnaeus) Tree Pipit
Collected: Molem
♂ 21g c. 84 15 22 c. 60
- The specimen cannot be placed with
certainty with either *trivialis* or *haringtoni* the
two subspecies that winter in the Peninsula.
Haringtoni is more earth brown, less olive
above, and its bill is slightly broader at the
base.
- Elsewhere noted: Canacona
141. *Motacilla indica* Gmelin
Forest Wagtail
Collected: Molem
♂ 16g 85 16 22 72
142. *Motacilla caspica* (Gmelin)

BIRDS OF GOA

Grey Wagtail

Noted: Molem

143. *Motacilla maderaspatensis* Gmelin

Large Pied Wagtail

Noted: Near Mapsa

144. *Dicaeum agile* (Tickell)

Thickbilled Flowerpecker

Noted: Valpoi

145. *Dicaeum concolor* Jerdon

Plaincoloured Flowerpecker

Collected: Molem, Canacona.

3 ♀ ♀ 5-6.5 g 45-45.5 11-13 12.5(2)
21-23

146. *Nectarinia zeylonica sola* (Vieillot)

Purplerumped Sunbird

Collected: Canacona

♂ 8 g 56 19 17 35

Elsewhere noted: Molem: commonly on
flowering *Loranthus* clumps.

147. *Nectarinia minima* (Sykes)

Small Sunbird

Collected: Molem, Valpoi

2 ♀ ♀ 5(2)g 41,44 14(2) 13,14 24,25

Elsewhere noted: Canacona

148. *Nectarinia lotenia hindustanica*

(Whistler) Maroonbreasted Sunbird

Collected: Molem

♂ 8 g 57 28 15 38

Subspecies identified by locality.

Elsewhere noted: Canacona

149. *Nectarinia asiatica asiatica* (Latham)

Purple Sunbird

Collected: Molem

♂ 8g 57 22 15 34

Elsewhere noted: Canacona

In regular attendance on flowering *Loranthus* abundantly parasiting 3 species of *Terminalia* in Molem forest.

150. *Passer domesticus* (Linnaeus)

House Sparrow

Noted: Common and abundant at Panaji.

151. *Petronia xanthocollis* (Burton)

Yellowthroated Sparrow

Noted: Molem, Canacona

152. *Ploceus philippinus philippinus*

(Linnaeus) Baya Weaver Bird

Collected: Molem

♂? 25g 65 18 22 42

153. *Lonchura striata striata* (Linnaeus)

Whitebacked Munia

Collected: Valpoi

o? 11 g 52 12 14 40

154. *Emberiza melanocephala* Scopoli

Blackheaded Bunting

Collected: Molem

♀ 25 g 89 17 23 67

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